

IN THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the present application.

1. (Currently amended) A transdermal delivery system (TDS) comprising a backing layer, a self-adhesive matrix containing an amine-functional drug, and a protective foil or sheet to be removed prior to use, wherein the self-adhesive matrix comprises a solid or semisolid semi-permeable polymer
 - (1) wherein ~~[[an]]~~ the amine-functional drug in its free base form is incorporated,
 - (2) which comprises within the matrix 10^3 to 10^9 microreservoirs per cm^2 of the surface of the matrix, said microreservoirs containing the amine functional drug,
 - (3) which is permeable to the free base of the amine functional drug,
 - (4) which is substantially impermeable to the protonated form of the amine functional drug, and
 - (5) wherein the maximum diameter of the microreservoirs is less than the thickness of the matrix and is not greater than $35\ \mu\text{m}$;and wherein the backing layer is inert to the components of the matrix.
2. (Previously presented) The TDS of claim 1, wherein the mean diameter of the microreservoirs is in the range of 0.5 to $20\ \mu\text{m}$.
3. (Previously presented) The TDS of claim 1, wherein the amine functional drug has an octanol/water partitioning coefficient ($\log p$) ≥ 2.8 at pH 7.4.
4. (Previously presented) The TDS of claim 1, wherein the amine functional drug has a pKa of 7.4 to 8.4.
5. (Previously presented) The TDS of claim 1, wherein the amine functional drug is a dopamine D2 receptor agonist.
6. (Previously presented) The TDS of claim 5, wherein the dopamine D2 receptor agonist is an aminotetralin compound.
7. (Canceled)

8. (Previously presented) The TDS of claim 1, wherein the amine functional drug is an anticholinergic drug.
9. (Previously presented) The TDS of claim 8, wherein the anticholinergic drug is oxybutynin.
10. (Previously presented) The TDS of claim 1, wherein the self-adhesive matrix is free of particles that can absorb salts of the amine functional drug at the TDS/skin interface.
11. (Currently amended) The TDS of claim 1, wherein the **polymer self-adhesive** matrix comprises a silicone pressure sensitive adhesive.
12. (Currently amended) The TDS of claim 1, wherein the **polymer self-adhesive** matrix comprises two or more silicone pressure sensitive adhesives **~~as the main adhesive components~~**.
13. (Previously presented) The TDS of claim 12, wherein the silicone pressure sensitive adhesive is a blend of a high tack silicone pressure sensitive adhesive comprising polysiloxane with a resin and a medium tack silicone pressure sensitive adhesive comprising polysiloxane with a resin.
14. (Canceled)
15. (Previously presented) The TDS of claim 1, wherein the microreservoirs additionally contain at least one crystallization inhibitor comprising soluble polyvinylpyrrolidone, a copolymer of polyvinylpyrrolidone and vinyl acetate, polyethylene glycol, polypropylene glycol, glycerol, a fatty acid ester of glycerol and/or a copolymer of ethylene and vinyl acetate.
16. (Previously presented) The TDS of claim 15, wherein the at least one crystallization inhibitor comprises soluble polyvinylpyrrolidone.
17. (Previously presented) The TDS of claim 1, comprising within the matrix 10^6 to 10^9 microreservoirs per cm^2 of the surface of the matrix.
18. (Previously presented) The TDS of claim 1, wherein the maximum diameter of the microreservoirs is 2.5 to 30 μm .